

#### DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY

#### DLA LAND AND MARITIME

# Welcome Industry Forum

Thursday
25 June 2015

#### DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY









# Administrative Remarks

Lt Col Kimberley Hammond



# **Administrative Remarks**

Visitor's Badge	Must be worn at all times		
<b>Building Access</b>	Visitors must remain on the 1st floor		
Restrooms	Directly in front of the auditorium on either side of the hallway		
Vending	Machines located in A124S.		
Cafeteria	Pod B on 1 <sup>st</sup> floor; WIFI available		
Smoke Area	South side of the building		
Installation Emergency Services	Notify an associate if you need emergency assistance		



# **Thursday Agenda**

June 25, 2015

Time	Topic	Presenter	
0730-0900	Arrival / Sign-In	Bldg. 20 Auditorium Entrance	
0900-0905	Administrative Remarks	Lt Col Hammond	
0905-0915	Welcome Remarks	Mr. James McClaugherty, Deputy Commander	
0915-0930	Commander's Remarks	RDML John King	
0930-1000	Keynote Speaker	Ms. Roxanne Banks, Deputy Director, DLA Acquisition	
1000-1015	Break		
1015-1145	Panel Discussion	National Defense Industrial Association	
1145-1300	Lunch	Bldg. 20 Cafeteria	
1300-1345	Meet the Director	Lt Gen Andrew Busch	
1345-1355	Administrative Remarks	Lt Col Hammond	



# **Thursday Agenda**

June 25, 2015

Time	Topic	Location / Presenter			
Breakout Sessions (concurrent sessions available for attendee selection)					
1400-1445 1500-1545	Expanding Competition	Bldg. 20 Auditorium / Rocky Sunday			
1400-1445 1500-1545	Combat & Wheeled Vehicles	DFAS; DLA Room (C136) / Land Customer Ops			
1400-1445 1500-1545	Protecting the Supply Chain	DFAS; Navy Room (C137) / Dave Szczublewski			
1400-1445 1500-1545	Vendor Performance Measurement	DFAS; Army Room (C147) / Mark Brown			
1200-1400 1400-1600	Speed Matchmaking with Land & Maritime and Prime Contractors	DFAS; Air Force Room (C153)/ Coleen McCormick			
1400-1445 1500-1545	DFAS Accounts Payable	DFAS; USMC Room (C146)			
1600	Departure				



# **Breakout Descriptions**

**June 25, 2015** 

#### 1. Expanding Competition

Engineering & Technical Support Directorate will address how they are partnering with industry to improve support to the warfighters through Source Approval Requests (SAR), Reverse Engineering, Repair Parts Purchase or Borrow (RPPB), and Casting & Forging Support to Industry.

#### 2. Combat & Wheeled Vehicles

DLA Land and Maritime will expand on topics presented during the Industry Forum and will discuss sustainment of strategic platforms, and trends and challenges in the Combat & Wheeled Vehicles industry over the next 5 years.

#### 3. Protecting the Supply Chain

DLA Land and Maritime will expand on topics presented during the Industry Forum and will address efforts being done to mitigate counterfeiting, improve stock integrity, and decrease customer complaints through DNA marking, supplier qualification programs, contractual testing and high risk procurement surveillance.



# **Breakout Descriptions**

June 25, 2015

#### 4. Vendor Performance Measurement

Business and Procurement Process Support Directorates will explain how DLA Land and Maritime assesses vendor delivery and quality performance utilizing Vendor Performance History (VPH), Contractor Performance Assessment Reports System (CPARS), and Past Performance Information Retrieval System (PPIRS).

5. Speed Matchmaking with Land & Maritime and Prime Contractors
The Office of Small Business Programs will provide matchmaking between
small businesses and DLA Land and Maritime personnel along with
networking for possible sub-contracting opportunities.

#### 6. DFAS Accounts Payable

DFAS will explain separation of duties, partial payments, Econvergence, DLA Lines of Accounting, Payment Office Changes, and Treasury Direct Initiative.



# Conclusion



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# **Welcome Remarks**

Mr. James McClaugherty Deputy Commander



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# Commander's Remarks

"Achieving Affordable Warfighter Support"

**RDML John King** 



# **Expectations**

#### What We Expect from Industry

- Engagement (let us help you)
- Provide Feedback
- Ideas for Innovation...PBLs & What Incentivizes You
- Focus on Cycle Times (Production & Contractual)
- Sharing Your Challenges, Innovations & Concerns (Mutual CPI Opportunities)

#### What Industry Can Expect from DLA L&M

- Transparency & Open Communication
- Focus of BBP Tenets
- Sharing Demand & Forecasting Data
- Responsiveness & Open to Where We Can Do Better
- Sharing Your Challenges, Innovations & Concerns (Mutual CPI Opportunities)
- Engagement Early & Often
- PBLs & Other Creative Solutions

#### Stay Warfighter Focused!



# Conclusion



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# **Keynote Speaker**

Ms. Roxanne Banks
Deputy Director,
DLA Acquisition



# Conclusion





## **Break**

Return in



minutes...

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# National Defense Industrial Association

COL (Ret) Gregory Potts, USA
The SPECTRUM Group
Panel Moderator



# Better Buying Power (BBP):

- The Good
- The Not-So-Good
- The TBD





# BBP: The Good, The Not-So-Good, The TBD

- The Good
  - Move from reforming acquisition to dominant capabilities
  - Workforce Professionalism ~ training of civilian workforce
  - Cybersecurity
  - Commercial vice in-house technology emphasis
  - Modular Open Systems Architecture
  - Promoting Effective Competition





# BBP: The Good, The Not-So-Good, The TBD

- The Not-So-Good
  - Incremental change to the point of 'baby steps'...
  - Disconnect of not leveraging commercial STEM workforce
  - Incentives to Industry...PBL? but metrics / incentives for USG?
  - 'Should cost' means...?!
  - Overruns.....for 'too big to fail', okay, but for SBs...
  - Addressing 'products' vice 'services'





# BBP: The Good, The Not-So-Good, The TBD

- The TBD
  - Rather than postponing a BBP 4.0, start now...
  - Acquisition reform has a long way to go... how many steps?
  - "If we did it with MRAP..."
  - Sequestration and re-balancing & IB compression... a new normal... suggest so
  - LPTA... suggests the lowest price drives... re-brand as 'TALP"....determine TA first, and then select LP
  - LB / SB Relationships: great to have SB goals in RFP ~ consider incentives & disincentives for achieving during life of contract





# Powering Future Weapon Systems



EaglePicher™
Technologies, LLC
An CMG Company



#### Overview

#### Theme:

How do we prioritize our strategic interests in achieving national defense objectives through procurement policies?

#### Case in Point:

Batteries for future, energy-based, weapon systems and soldier portable power.





#### Defense Weaponry is Changing...We Must Evolve











#### **TODAY**

Almost all weapon systems and soldier portable power rely on batteries made in the United States.

#### **TODAY\***

Javelin ~ \$250K Hellfire ~ \$110K Tomahawk ~ \$1.5M

#### **US INDUSTRY CAPABILITY**

FeS<sub>2</sub>/AgZn SO<sub>2</sub>/Li-CFx/Oxyhalide Energetics

#### **FUTURE**

Many of DoD's current weapon systems are becoming obsolete over the next 5-10 years as directed energy weapons are fielded.

#### **FUTURE\***

EM Railgun Sabot ~ \$25K Laser Shot ~ \$1

#### **NEEDED EXPANSION**

Lithium ion Super capacitors

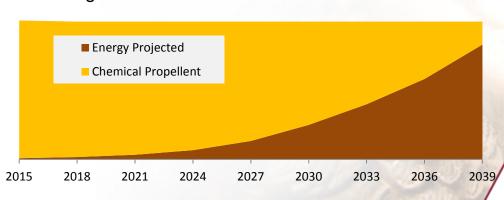








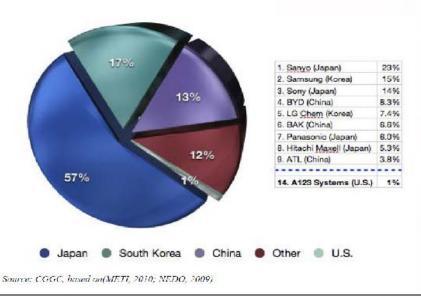






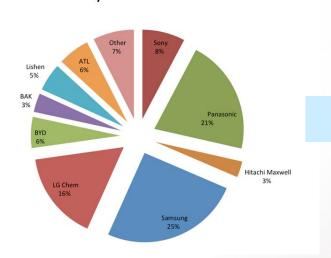
# Where are the batteries coming from for these prototype systems today?

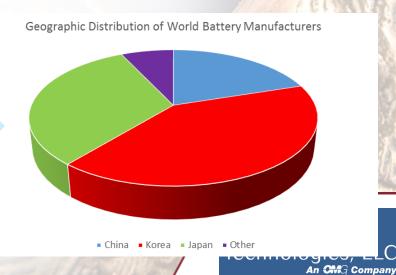
Different sources differ slightly on the numbers - but, all agree: Asia!





#### **World Battery Manufacture Market Share**







### Problems with Batteries from Asia

- Configuration Control
- Consumer Focus Drives Lower Cycles
- Quality Control
- Potential Conflict Interruption
- Obsolescence Control

#### Positives Associated with Batteries from Asia

Consumer Quantities Drives Lower Price





# Applicable to Many Hi-Rel Markets

#### **Energy**:

- ➤ Power Pyramid<sup>™</sup>
- Na-Beta Technology
- Peak-Shaver/Microgrid
- Oil & Gas
  - Down-Hole
  - Ocean Floor

#### Missiles:

- Thermal
- Silver 7inc

**Defense** 

- **Energetic Devices**
- Lithium Oxyhalide



#### **Portable Power:**

- Lithium Sulfur Dioxide
- Lithium Manganese Dioxide
- Lithium Carbon Monofluoride
- Lithium Thionyl Chloride



#### **Medical Power:**

- Lithium Ion
- Lithium Manganese Dioxide
- Lithium Thionyl Chloride
- Lithium Carbon Monofluoride

**Distributed** 

**Products:** 

Microcell & Custom Design

Sealed Lead Acid Lithium Thionyl

Chloride

# **Energy** 0% <1% 37% Medical 2013 Aerospace

#### 2018

#### Space:

- > Sodium Sulfur
- Nickel Hydrogen
- > Lithium Ion



#### **Engineering Services:**

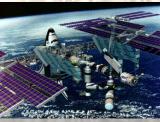
- Chargers
- **Analyzers**
- Test Systems
- **Custom Packaging**
- **Battery Mgmt Systems**



#### Aircraft:

- Lithium Ion
- Nickel Cadmium
- Nickel Metal Hydride
- Primary Lithium





<Courtesy of NASA>









2018-28%



# Defense Production Act (2950), Title III Lithium-Ion for Military Applications (LIMA)



Program Purpose: The United States Government (USG) sought to:

- Ensure that a *domestic source of high energy density Li-ion batteries* continues to be accessible for meeting military requirements.
- Create a flexible production line capable of multiple battery form factors for both military and commercial applications, to *effectively reduce the cost* of high energy density Li-ion batteries, by leveraging increased combined assembly line volumes, even at low production runs of individual battery form factors.
- Develop a comprehensive Strategic Business Plan that addresses the key aspects of establishing a competitive and commercially viable capacity for the manufacture of Li-ion batteries.





# Production Capacity Expansion ~ \$30M

- Production requirements
  - Solicitation: Establish LRIP capacity for cells and batteries
  - Initial volume analysis the Market Chart
- Proposed facility designed for robust LRIP capacity
  - New 100,000 ft<sup>2</sup> facility to be provided by Joplin investment
  - Manufacturing equipment for multiple LRIP cell lines included in proposal
  - Capacity estimated capable of LIMA production through ~ 2020
- Facility includes expansion capacity
  - Additional slurry mixing and coating
  - Additional production lines
  - Anode powder synthesis

	Cell Configurations		
Capacity (Ah)	Cylin- drical	Pouch	Prismatic (Hard Case)
3		Х	
3.7	X		
5			X
6	X		
10		X	
18		X	X
30			Χ
45			X
55			X
68			X
75			X
250			X

LIMA production capacity 13 formats at 2M cells/year.

By comparison, a Chinese line produces 1 format at ~1M cells/day.





#### Issues and Concern

• The math...

A BA-2590 Rechargeable Lithium-Ion Battery sells for about \$330.00. (www.atbatt.com)

It contains 20 18650 cells that each cost about \$4.00 on Alibaba from a Chinese source.

Under a specific load it will last about 7-hours between recharges.



By comparison...

LIMA produced battery will sell for about 40% more and last for about 40% longer.

 And, while the above example is for soldier portable power...

#### Concern...

Under current procurement rules the Chinesebased product qualifies as "Made in the USA"

Award likely to the Chinese-based product based on price without regard for performance or the national objective of creating a domestic source.

The 26650 cells being used in railgun trials today are "Made in China."



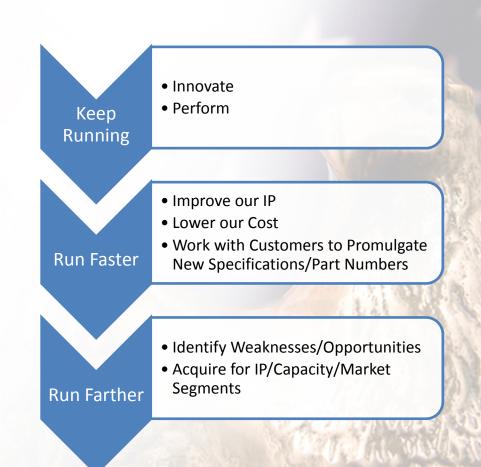


# Achieving LIMA Objectives Means Winning the Lithium Ion Race for Specialty Applications



Title III
Lithium-Ion
For
Military
Applications
(LIMA)





Questions?

Eagle Picher™ Technologies, LLC An CMG Company



- Obsolescence
- Legacy Standards & Equipment
- Technology
- Supply Chain
- Small Business





#### Obsolescence

- Increasingly Difficult to Continue Sale and Maintenance of long-term products without Occasional updating of designs and/or re-Qualification
- Obsolescence drives Considerable Cost to Businesses Serving the Warfighter Community as well as the Gov't
- Re-qualification Process Streamlining and Funding Needed to offset Design Update Costs
- Resolve Obsolescence issues through Intelligent 'Quick Action' Partnering between Gov't and Business for Smaller Procurements, Saving Time and Cost



# Legacy Standards & Equipment

- Support of Early Standards and Equipment Increasingly Difficult and Costly
- Total Replacement typically more Expensive, often Requiring Considerable Time and Effort to Justify and Procure
- Affordable Solutions range from Inter-Standard Conversion Systems and Equipment through System Virtualization Approaches
- Inter-operability Standards and Validation Requirements Needed
- Programs and Funding for such Solutions Imperative





# Technology

- Improved Performance and Reliability Through Technology Upgrades and Functional Replacement Examples include:
  - Weight reduction and reliability improvements replacing copper-based with optical-based cables and harnesses;
  - Replacing Unsupportable Legacy Equipment with Modern Redesigned Counterparts
- Streamlined Methods to Communicate Warfighter needs to Industry
- Strengthen local Warfighter Authority to Specify and Procure
- 4. Encourage more dialog between Warfighter Command Offices and Industry regarding Needs and Wants





### **Electronics Sector**

# Supply Chain

- More Punctual Posting of Requirements on FedBizOps Site - most are posted well after original requirements have been established
- FedBizOps site should add an "Industry Inquiry" phase prior to formal advertising of requirement listings
- Need for Gov't <u>no-obligation</u> "Wish List" postings to stimulate industry awareness and interest in potential upcoming requirements
- Increased Authority to Local Warfighter Offices for Setting Priorities, Budgeting, and Procurement
- Reduce "Red-tape" required for smaller procurements





### **Electronics Sector**

### Small Business

- A Strong Defense Industry depends on Agile Small Business Participation
- Small Business is a major asset to Warfighter offices as well as Large Business, promoting Improved Cost and Services for Larger Programs
- 3. While encouraged to a Certain Degree, <u>Much More</u> can be done to Strengthen Small Business' ability to Support today's Warfighter
- 4. Consider revising the NAICS to improve correlation between what a business *actually* does versus native NAICS business classifications
- 5. Increase # of Business Size Classifications
- Increase R&D/Engineering Opportunities/ for Small Business





### **Electronics Sector**

### Small Business

- 7. Streamline Small Business Qualification Process
- Provide Improved Financial Resources to Small Business
- Strengthen Small Business Advocacy by Gov't to Larger Prime Contractors
- Develop Improved Fairer Small Business Rating System







# **MAROTTA®**

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# Valve Technology Trends: Electronics



- Complete systems with electronics
- DC brushless
- Proportional control
- Variety of power, torque, speed and positioning

- Reduce weight
- Reduce through-life costs
- Reduce corrosion sensitivity





# Valve Technology Trends: Piezo Actuation



- Fast actuation
- Low power consumption
- High dynamic control

- Multi-functional reduced part count
- Reduces system procurement
- Reduces integration cost

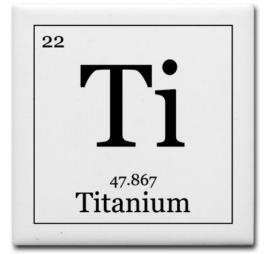




# Valve Technology Trends: Exotic Materials



- Seawater resistance
- Lighter weight
- Structural improvements



- Materials
  - Hastelloy
  - Tantalum
  - Peek 450
  - Polypropylene
  - Titanium





# Valve Manufacturing Trends: Optimized Operations



Utilization of 5+ Axis Machinery

- Job stays in one work center
- Reduces shop movement
- Helps planning and distribution
- Reduces handling and damage
- Reduces waste using lean practices
- Must understand quantities
- Bulk buys
- Smarter ordering

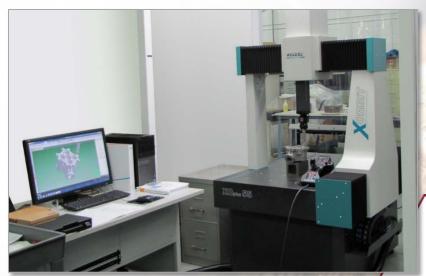




# Valve Manufacturing Trends: Automated Inspection Systems



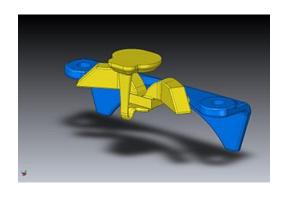
- Improves quality control and consistency
- Improves delivery schedule
- Minimizes handling
- Reduces cost



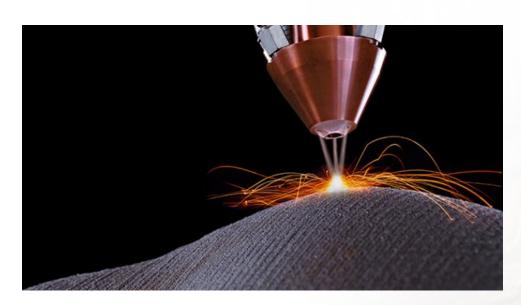




# Valve Manufacturing Trends: Additive Manufacturing



- Improves delivery schedule
- Multi-piece assembly can become one
- Changes in material properties
- Certifications







### Questions?

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# Success In "This" Environment As A Vehicle OEM

Jim Grooms
Vice President
Logistic & Sustainment
540-847-0713
Jim.grooms@navistar.com





### Who is Navistar?







# NAISTAR®











2007

100 years of service...



# Where is the industry today?

#### **Vehicle OEM's Environment**

- Continue to support deployed activities
- Reset/Upgrades for enduring fleets
- Excess Defense Articles
- USG Emphasis on divestiture
- Many fleets full & very early in service life
- Major program pending..... JLTV
- OEM Focus on FMS/Foreign





# So what helps Vehicle OEMs (and maybe all)?

<u>Paradigm Shifts</u>: Industry must change the way of doing business (or *model* those that are successful).

**Streamline:** Can existing methods that guide DoD business be changed? Streamlined?

OEM Involvement: Who knows the product better? (definitely an OEM view)

Innovation: Often stated, tough to implement.
Required if we are going to have "break-throughs" from industry and USG



# What helps both parties?

**Industry Streamlined process** 

Transparency into direction, forecasting, etc.

Open dialogue and collaboration

Willingness for unique approaches

**USG**Streamlined process

Transparency into proposals

Open dialogue and collaboration

Clarity on use of implementing unique approaches





### What is impacting the vehicle industry?

#### **Developing Trends**

- Difficult to incorporate the "great ideas" of industry
- STS contracts are useful tools to advance ideas
- Ideas require "investment", which is difficult during low production times
- Result? Just keep trying to keep vehicles relevant and technologically advancing (e.g., AV)

#### **Supply Chain Issues**

- Potential Help.... 3D Manufacturing
- Major Threat.....3D Manufacturing
- DMS/MS....every tier down it becomes more difficult for suppliers.



# An OEM solution - Customized Parts Programs

"Leverage commercial, manage risks"

#### Commercial Spare Industry

- ✓ Leveraged Parts --- availability
- ✓ Customized stocking and parts buyback programs
- ✓ Reset stocking plans
- ✓ Remanufactured components
- ✓ Supply Base
- ✓ Depot management
- ✓ Repower
- ✓ Engines
- ✓ Threats
  - ✓ Lower volumes
  - ✓ Stop and restarting suppliers --- out of production
  - ✓ Reverse engineering/Additive Mfg
  - ✓ Supplier consolidation
  - ✓ Increased Prices









## Conclusion





### **Lunch Break**

We will resume at 13:00



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# Land and Maritime Industry Forum

25 June 2015

Lt Gen Andy Busch Director, DLA



# **Strategic Plan Goals**



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# Administrative Remarks

Lt Col Kimberley Hammond



## Conclusion





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#### **DLA LAND AND MARITIME**

# Industry Forum Breakout Sessions

25 June 2015